IN THE SPECIFICATION

Sep 15 04 07:30p

On page 39 of the specification, delete the paragraph immediately following the section title "DNA cloning of human ABCA1," and replace it with the following paragraph:

Based on sequence information of mouse ABCA 1 cDNA we designed primers for RT-PCR analysis in order to amplify the human ABCA 1 (ABC I) cDNA. Approximately I μg of RNA from five day differentiated mononuclear phagocytes was reverse transcribed in a 20 p.l reaction using the RNA PCR Core Kit from Perkin Elmer. An aliquot of the cDNA was used in a 100 µl PCR reaction performed with Amplitaq Gold (Perkin Elmer) and the following primer combinations: (primer names indicate the position in the corresponding mouse cDNA sequence):

mABC1-144f (5 '-CAAACATGTCA GCTG TTACTGGA -3') (SEQ ID NO:35) and mABCI -643r (5 '-TAGCCTTGCAAA-AATACCTTCTG-3') (SEQ ID NO:36), mABCI-1221f (5 '-GTTGGAAAGATTCTCTATACACCTG-3') (SEQ ID NO:37) and mABC1-1910r (5'-CGTCAGCACTCTGATGATGGCCTG-3') (SEQ ID NO:38), mABCI -3622f (5 '-TCTCTGCTA TCTCCAA CCTCA -3') (SEQ ID NO:39) and mABCI-4620r (5 '-ACGTCTTCACCAGGTAATCTGAA-3') (SEQ ID NO:40), mABCI -5056f (5 '-CTATCTGTGTCATCTTTGCGATG-3') (SEO ID NO:41) and mABCI-5857r (5 '-CGCTTCCTCCTATAGATCTTGGT-3') (SEQ ID NO:42), mABC1-6093f (5 "-AA GA GA GCA TGTGGA -GTTCTTTG-3') (SEQ ID NO:43) and mABC1-7051 r (5 '-CCCTGTAATGGAATTGTGTTCTC-3') (SEQ ID NO:44), hABC1-540f (5 "-AA CCTTCTCTGGGTTCCTGTA TC -3') (SEQ ID NO:45) and hABC1-1300r (5'-AGTTCCTGGAA-GGTCTTGTTCA C-3') (SEQ ID NO:46). hABC1-1831f (5 '- GCTGA CCCCTTTGA GGA CA TGCG-3')(SEQ ID NO:47) and hABC1-3 701 r (5'-A TA GGTCA GCTCATGCCCTA TG T-3') (SEQ ID NO:48), hABC1-4532f (5 '-GCTGCC-TCCTCCACAAAGAAAAC-3') (SEQ ID NO:49) and hABCI -5134r (5 '-GC777 GCTGACCCGCTCC-TGGATC-3') (SEQ ID NO:50), hABC1-5800f (5'-GAGGCCAGAATGACATCTTAGAA-3') (SEQ ID NO:51) and hABC1-6259r (5 '-CTTGACAACACITAGGGCACAA T-3') (SEQ ID NO:52).

IN THE SPECIFICATION

On page 37 of the specification, delete the paragraph immediately following the section title "Sterol Regulation of ABCA1 mRNA Expression," and continuing on page 38 up to but excluding the section title "Cell culture," and replace with the following:

In order to determine the regulation of ABCAI in monocytes/macrophages during 20 cholesterol loading/depletion Northern Blot analysis was performed. The cloned 1000-bp DNA fragment derived from PCR amplification of RNA from five day differentiated monocytes with primers ABCA1 3622f (CGTCAGCACTCTGATGATGGCCTG-3') SEQ ID NO: 33, and ABCA1 4620r (TCTCTGCTATCTCCAACCTCA-3') SEQ ID NO: 34, was hybridized to Northern Blots containing RNA of differentially cultivated monocytes (figure 12). As can be seen in lanes one to five, the ABCA 1 mRNA is increased during in vitro differentiation of freshly isolated monocytes until day five. Longer cultivation results in a total loss of expression. When the cells were incubated in the presence of AcLDL to induce sterol loading (lanes 6-8) beginning at day four, a much stronger accumulation of mRNA can be detected in comparison to control cells (lane 2-5). When these cells were cultured with HDL3 as cholesterol acceptor for 12h, 24h and 48h (lanes 9-11) the ABCA1 signal significantly decreases with respect to control cells incubated in the absence of HDL₃ (lanes 12-14). Taken together, these results indicate that ABCA1 is a sterol-sensitive gene which is induced by cholesterol loading and downregulated by cholesterol depletion.